CHAPTER 8

MONEY STOCK MEASURES[1]

1 This chapter heavily draws its content from Report of Working group on 'Money Supply: Analytics and Methodology of Compilation' and an article named New monetary aggregation: An introduction, RBI Bulletin October 1999.

In this Chapter, I will learn

- SECTORISATION OF THE ECONOMY
- MONETARY AND LIQUIDITY AGGREGATES
- ANNEXURE

Money stock means the total amount of money available in an economy at a particular point of time. It is also called money supply. The money supply measure is necessary because the amount and nature of money supply has greater influence and impact in the economy.

Reserve Bank of India, the monetary authority of India, has a long tradition of publishing monetary statistics dating back to July, 1935. The method of compilation of monetary data had undergone revision three times. The methodological changes were made on the recommendation of working groups formed by RBI. The first working group was formed in 1961 and the second working group was formed in 1977[2] (Annexure). The third working group (Working group on money supply: Analytics and Methodology of Compilation) was formed in the year 1997 under the chairmanship of Dr. Y. V. Reddy (the then deputy governor of RBI). Now, RBI follows the method recommended by this third working group.

The recommendations of third working group was necessitated by and considered the changing circumstances of Liberalisation, Privatisation and Globalisation (LPG) era and to ensure that the Indian standards in this regard are close to the international ones.

2 Methods of second working group are provided in the annexure

Money

Before getting into the methods of third working group, it is necessary to know what money is. Money does not include coins and currencies only. It includes other financial assets too. But there is difference among economists in the definition of money and the financial assets to be included in the category of money. The third working group observes, "There is no unique definition of 'money', either as a concept in economic theory or as measured in practice......... money has to have relationship with the activities that economic entities pursue. Money can, therefore, be defined for policy purposes as set of liquid financial assets, the variation in the stock of which could impact on aggregate economic activity."

The money is classified into different types of financial assets based on their liquidity. Liquidity means the ease at which we can spend a financial asset. For example the currency at hand can be spent very easily. The currency deposited in banks can't be spent easily like that of the currency at hand because we have to go to bank or ATM to draw money and then only we can spend it. It involves some delay and manual labour. So, it is considered less liquid than currency at hand.

SECTORISATION OF THE ECONOMY

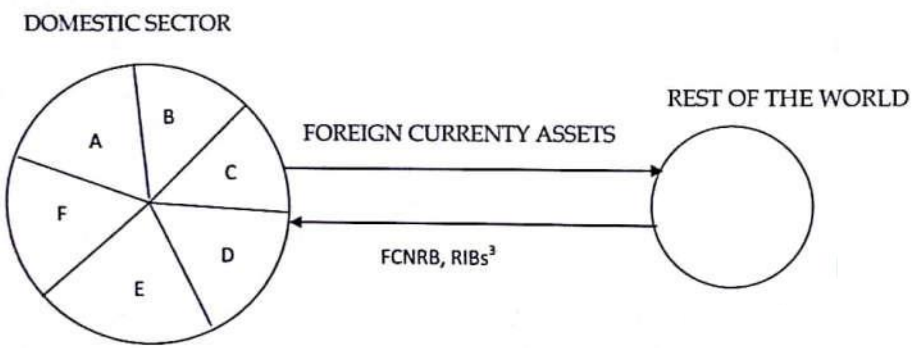
For the purpose of the compilation of monetary and liquidity aggregates, the third working group divided the economy into domestic sector and rest of the world. The domestic sector was further divided into four exclusive sectors, viz.,

1. Households
2. Non-financial commercial sector
3. General government
4. Financial corporations

The financial corporation sector comprises banking sector, consisting of the RBI and the banking systems in India and the other financial corporation sector. The other financial corporation sectors comprises development financial institutions such as term lending institutions and refinancing insurance corporations, Mutual funds and non banking financial companies accepting deposits from the public.

The domestic sector can also be classified as money issuing sector and money holding sector. Money issuing sector comprises RBI and Banking systems in India. Money holding sector comprises Households, other financial corporations and non-financial commercial sector. This is represented in chart 8.1

Chart 8.1: Sectorisation of the Economy for Money Supply Compilation



A:HOUSE HOLDS	
B: RBI	B+C : BANKING SECTOR
C: BANKING SYSTEMS IN INDIA	B+C+D : FINANCIAL CORPORATIONS SECTOR
D:OTHER FINANCIAL CORPORATIONS	

E: GENERAL GOVERNMENT	B+C: MONEY ISSUING SECTOR
F: NON-FINANCIAL COMMERICAL SECTOR	A+D+F: MONEY HOLDING SECTOR

MONETARY AND LIQUIDITY AGGREGATES

The third working group recommended two different financial aggregates namely, Monetary Aggregates and Liquidity Aggregates. The working group observes: "The partition between monetary and liquidity aggregates has been dictated by the fact while the first relates only to monetary liabilities of the central bank and depository corporations', i.e. the banking system, the latter also includes select items of financial liabilities of non-depository corporations, such as development financial companies and non-banking financial companies accepting deposits from the public apart from post office savings."

The development finance institutions which do not accept time deposit from public is called non-depository corporations.

Liquidity Aggregates include more number of financial assets than that is included in the Monetary Aggregates.

Monetary Aggregates

The new monetary aggregates are of four types. They are:

1. Reserve money or Base money (M_0)
2. Narrow money (M_1)
3. Intermediate money (M_2) and
4. Broad money (M_3)

1. Reserve Money or Base Money (M_0)

The financial assets in the M_0 category is called reserve money because these are held in reserve either by public and banks (Currency in Circulation) or by the RBI (Bankers Deposits with the RBI + Other Deposits with the RBI) and these are not available for the lending purpose of banks.

M_0= Currency in Circulation + Bankers Deposits with the RBI + Other Deposits with the RBI

Currency in circulation is the total amount of the Rupee notes issued by RBI and the Rupee coins and small (paisa) coins issued by Government of India. Currency in circulation is equal to the total of the currency held by both public and banks. Bankers deposit with RBI includes Cash Reserve Ratio (CRR) and excess reserve. The banks keep CRR with RBI as stipulated by the latter. Some banks keep more cash reserve with RBI than stipulated amount. It is called **Excess Reserve**.

Other deposits with RBI comprise mainly

Deposits of quasi-government and other financial institutions including primary dealers

Balances in the accounts of foreign central banks and governments

Accounts of international agencies such as the IMF etc, and

Provident, gratuity and guarantee funds of RBI staff

Primary dealers are financial intermediaries operating in Government securities (G-Secs) and other financial instruments.

2. Narrow Money (M_1)

The financial assets included in the category of M_1 are fewer than those included in the category of M_2. That means, it defines money in a narrower sense. So, it is called Narrow Money.

M_1 = Currency with the Public + Demand Deposits with the Banking System + Other Deposits with the RBI.

Currency with the public is equal to currency in circulation minus cash on hand with the banking system.

Demand deposits are those deposits that can be withdrawn by depositor at any point of time.

There are two major types of demand deposits viz., current deposits and saving deposits. The saving deposits have two components namely demand liability and time liability. Most part of the saving deposits is demand liabilities only. But few saving deposits can be withdrawn only on some performance or on some happenings. For example a saving deposit made in the name of a child may be deposited with a condition that it can be withdrawn only after the child become a major. This is an example for time liability portion of saving deposits.

In M_1, only demand liability portion is included. So, the above equation can be rewritten as follows:

= Currency with the Public + Current Deposits with the Banking system + Demand liabilities portion of Saving Deposits with the Banking System + Other Deposits with RBI.

The Second working group had apportioned saving deposits into demand and time liabilities on the basis of interest application on such deposits. This practice is continued by the third working group also.

3. Intermediate Money (M_2)

It is called intermediate money for the reason financial assets included in this category are more than those included in M_1 but less than those included in M_3.

M_2 = M_1 + Time Liabilities portion of savings Deposits with the Banking system + Certificates of Deposit issued by Banks + Term Deposits (excluding Foreign Currency Non-Resident (Bank) (FCNR (B)) Deposits) up to one year maturity with the Banking system.

It can be rewritten as follows:

= Currency with the public + Current Deposits with the Banking System + Savings deposits with the banking system + Certificates of deposits issued by Banks + Term Deposits with the Banking System + Term Deposits (excluding FCNR (B) deposits) up to and including one year maturity with the banking system + Other deposits with the RBI.

4. Broad Money (M_3)

The financial assets included in the category of M_3 are more than those included in the category of M_2. That means, it defines money in a wider sense. So, it is called Broad Money.

M_3 = M_2 + Term Deposits (excluding FCNR (B) Deposits) over one year maturity with the Banking system + Call borrowings from 'Non – Depository' Financial Corporations by the banking system.

Liquidity Aggregates

L_1 = M_3 + All Deposits of Post office Savings Banks excluding National Savings Certificates (NSCs)

L_2 = L_1 + Term Deposits with Term Lending Institutions and Refinancing Institutions (FIs) + Term borrowing by FIs + Certificates of Deposit issued by FIs

L_3 = L_2 + Public Deposits of Non-Banking Finance Companies (NBFCs)

Money Multiplier (Mb)

Money multiplier is the ratio between Broad money (M_3) and Reserve money (M_0)

$M_b = M_3 / M_0 = M_3 \times 1/M_0$

It means the M_3 will get multiplied by $1/M_0$ times. For example, if Reserve Money is 20%, $1/M_0$ will be 5 (1/20 x 100 = 5). Then M_3 will get multiplied 5 times in the economy. It means money supply will increase 5 times.

ANNEXURE

RBI followed the following method since 1979 till implementation of current method.

M_1 (Narrow Money)

M_1 = Currency with the Public + Demand Deposits of banks + Other demand deposits with RBI

M_2 (Intermediate money)

M_2 = M_1 + Post office Savings Deposits

M_3 (Broad Money)

M_3 = M_1 + Time Deposits of the Public with Banks.

M_4

M_4 = M_3 + Total Post office deposits.